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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/040,315

10/29/2001

Robert V. Farese JR.

UCAL-105CIP2

1732

24353 7590 09/17/2007  
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EXAMINER
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HUTSON, RICHARD G

ART UNIT	PAPER NUMBER
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1652

MAIL DATE	DELIVERY MODE
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09/17/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/040,315

Applicant(s)

FARESE ET AL.

Examiner

Richard G. Hutson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15,17,18,21 and 68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15,17,18,21 and 68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's cancellation of claim 17, amendment of claim 15 and the addition of new claim 68, in the paper of 7/3/2007, is acknowledged. Claims 15, 17, 18, 21 and 68 are still at issue and are present for examination.

Applicants' arguments filed on 7/3/2007 have been fully considered and are deemed to be persuasive to overcome some of the rejections previously applied. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.

#### ***Claim Rejections - 35 USC § 102***

The rejection of claims 15, 17, 18, 21 and 66 are rejected under 35 U.S.C. 102(e) as being anticipated by Sturley et al. (U.S. Patent Number 6,100,077) is withdrawn based upon applicants amendment of 7/3/2007 and applicants arguments that the taught methods include the introduction of said candidate agent into a cell that includes said DGAT polypeptide and the detection of incorporation of [14C]-oleate into sterol ester and that applicants assert that the sterol ester is not an diacylglycerol acceptor.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 17, 18, 21 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sturley et al. (U.S. Patent Number 6,100,077).

As previously discussed, Sturley et al. teach the cloning and expression of the human diacylglycerol acyltransferase having the amino acid sequence of SEQ ID NO: 1, which is 100% identical to instantly disclosed SEQ ID NO: 6. Sturley et al. further teach methods for identifying a chemical compound which is capable of inhibiting diacylglycerol acyltransferase (DGAT) comprising contacting DGAT, having the amino acid sequence of SEQ ID NO: 6 with the chemical and detecting a change in enzymatic activity of the DGAT compared to a control. The taught methods include the introduction of said candidate agent into a cell that includes said DGAT polypeptide and the detection of incorporation of [14C]-oleate into sterol ester. Sturley et al. further teach that the cloned human diacylglycerol acyltransferase (AGRP1) likely catalyzes a reaction similar to ACAT1, such as an esterification reaction which uses fatty-acyl CoAs as substrates such as diacylglycerol acyltransferase. Sturley et al. further teach that there invention provides a method for identifying a chemical compound which is capable of inhibiting diacylglycerol acyltransferase in a subject which comprises: (a) contacting a wildtype diacylglycerol acyltransferase with the chemical compound under conditions permitting binding between the diacylglycerol acyltransferase and the chemical compound; (b) detecting specific binding of the chemical compound to the diacylglycerol acyltransferase; and c) determining whether the chemical compound inhibits the activity

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of the diacylglycerol acyltransferase so as to identify a chemical compound which is capable of inhibiting diacylglycerol acyltransferase in a subject.

One of ordinary skill in the art at the time of filing would have been motivated to identify a chemical compound which is capable of inhibiting diacylglycerol acyltransferase in a subject which comprises: (a) contacting a diacylglycerol acyltransferase identified and cloned by Sturley et al. as AGRP1 (SEQ ID NO: 1) with the chemical compound under conditions permitting binding between the diacylglycerol acyltransferase and the chemical compound; (b) detecting specific binding of the chemical compound to the diacylglycerol acyltransferase; and c) determining whether the chemical compound inhibits the activity of the diacylglycerol acyltransferase so as to identify a chemical compound which is capable of inhibiting diacylglycerol acyltransferase in a subject, as a means of identifying a chemical compound which is a potential pharmaceutical composition for the treatment of atherosclerosis. The taught methods include the introduction of said candidate agent into a cell that includes said DGAT polypeptide. Such methods of measuring diacylglycerol activity comprise detecting incorporation of a detectably labeled fatty acyl CoA into a diacylglycerol acceptor as well as detecting incorporation of a fatty acyl CoA into a detectably labeled diacylglycerol acceptor and measuring using TLC. The expectation of success is high based upon these same methods are successfully taught by Sturley et al. using other acyl acceptors and Sturley et al. teach the diacylglycerol acyltransferase of SEQ ID NO: 1.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

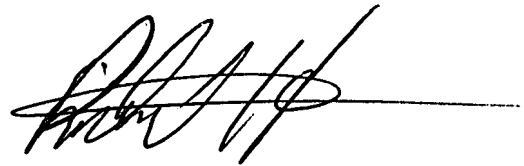
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard G. Hutson whose telephone number is (571) 272-0930. The examiner can normally be reached on 7:30 am to 4:00 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on (571) 272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Richard G. Hutson', with a horizontal line extending to the right.

Richard G Hutson, Ph.D.  
Primary Examiner  
Art Unit 1652

rg  
9/13/2007